

Complete Summary

GUIDELINE TITLE

Guidelines for Adolescent Depression in Primary Care (GLAD-PC): II. Treatment and ongoing management.

BIBLIOGRAPHIC SOURCE(S)

Cheung AH, Zuckerbrot RA, Jensen PS, Ghalib K, Laraque D, Stein RE, GLAD-PC Steering Group. Guidelines for Adolescent Depression in Primary Care (GLAD-PC): II. Treatment and ongoing management. Pediatrics 2007 Nov;120(5):e1313-26. [91 references] [PubMed](#)

GUIDELINE STATUS

This is the current release of the guideline.

COMPLETE SUMMARY CONTENT

SCOPE
 METHODOLOGY - including Rating Scheme and Cost Analysis
 RECOMMENDATIONS
 EVIDENCE SUPPORTING THE RECOMMENDATIONS
 BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS
 CONTRAINDICATIONS
 QUALIFYING STATEMENTS
 IMPLEMENTATION OF THE GUIDELINE
 INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT
 CATEGORIES
 IDENTIFYING INFORMATION AND AVAILABILITY
 DISCLAIMER

SCOPE

DISEASE/CONDITION(S)

Depression (major depressive disorders)

GUIDELINE CATEGORY

Assessment of Therapeutic Effectiveness
 Counseling
 Management
 Risk Assessment
 Treatment

CLINICAL SPECIALTY

Family Practice
Nursing
Pediatrics
Pharmacology
Psychiatry
Psychology

INTENDED USERS

Advanced Practice Nurses
Physician Assistants
Physicians
Social Workers

GUIDELINE OBJECTIVE(S)

To assist primary care clinicians in the treatment and ongoing management of adolescent depression in the primary care setting

TARGET POPULATION

Adolescents (youths aged 10 to 21 years) in primary care settings in the US and Canada

Note: This age range was chosen to include those who might be developmentally "adolescent."

INTERVENTIONS AND PRACTICES CONSIDERED

Treatment

1. Active support and monitoring
2. Selective serotonin reuptake inhibitors (fluoxetine, paroxetine, citalopram, sertraline, escitalopram)
3. Cognitive behavioral therapy (CBT)
4. Interpersonal therapy (IPT)
5. Combination pharmacotherapy and CBT or IPT
6. Monitoring for adverse treatment events

Ongoing Management

1. Goal and outcome tracking
2. Reassessment of diagnosis and treatment
3. Mental health referral
4. Coordination of care between primary care and mental health specialist care

MAJOR OUTCOMES CONSIDERED

- Assessment and screening scores

- Rate of improvement (reduction in symptoms, improved assessment scores) on therapy
- Rate of adverse event on pharmacotherapy
- Suicide and self-injury rate

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Hand-searches of Published Literature (Primary Sources)
 Hand-searches of Published Literature (Secondary Sources)
 Searches of Electronic Databases
 Searches of Unpublished Data

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

The literature-review approach used for all of the reviews was as follows. First, the Guidelines for Adolescent Depression in Primary Care (GLAD-PC) team identified the existence of high-quality, previously published, systematic evidence-based reviews that met the following criteria: (1) explicit definition of search terms and years covered; (2) exhaustive search of Medline; (3) reading of abstracts to determine relevance, followed by review of entire articles from relevant abstracts; (4) restriction to English-language journals only; (5) restriction to empirical articles; and (6) identification of any otherwise omitted citations from the reference sections from key reviews. In areas where there were no carefully executed and well-described systematic literature reviews had been recently conducted (i.e., Food and Drug Administration [FDA], Cochrane), the GLAD-PC team conducted a systematic review for primary studies for each area by using Medline (from inception to 2004/2005 based on the 5 criteria described above).

Three literature reviews were conducted for the GLAD-PC recommendations presented in this guideline: (1) nonspecific psychosocial interventions in pediatric PC, (2) antidepressant treatment, and (3) the use of psychotherapy. For the first review, the literature (Medline, PsycINFO, and the Cochrane database) was searched for articles that examined evidence for psychosocial interventions delivered in the PC setting. The reference lists of all relevant articles were searched for additional studies. In addition, experts in the field were consulted to identify additional studies. Given the paucity of randomized, controlled trials (RCTs) identified earlier in a review, studies with simple before-and-after comparisons were also included.

In the second review, the team examined the efficacy and safety of antidepressant medications in the pediatric population (aged 7 to 18). The studies were identified in 2 stages. Given the thorough reanalyses of safety data on both published and unpublished clinical trials completed by the FDA, all RCTs included in the FDA safety report were reviewed. Second, to ensure that additional studies not reported to the FDA were not missed, Medline and PsycINFO were searched. For a full description of the review, please refer to the published review.

In the final review, the team searched the literature for depression trials that examined the efficacy of psychotherapy. The search included all forms of psychotherapy including both individual and group-based therapies. The team not only identified individual studies but also high-quality systematic reviews given the extensive empirical literature in this area.

NUMBER OF SOURCE DOCUMENTS

Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Weighting According to a Rating Scheme (Scheme Given)

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

See the Oxford Centre for Evidence-Based Medicine (www.cebm.net/levels_of_evidence.asp).

METHODS USED TO ANALYZE THE EVIDENCE

Review of Published Meta-Analyses
Systematic Review

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus (Consensus Development Conference)

DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert consensus was reached through 2 stages. First, expert participants completed a survey regarding adolescent depression management. Subsequently, the expert participants then met in a 2-day workshop to review the survey results to reach consensus on key issues regarding identification and treatment of adolescent depression in PC. Overall, the guidelines only included recommendations that the experts agreed are highly appropriate and "first-line" practices. See the National Guideline Clearinghouse (NGC) summary of the [Guidelines for Adolescent Depression in Primary Care \(GLAD-PC\): I. Identification, Assessment, and Initial Management](#) for more information on the methods used to formulate the recommendations.

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Each of the recommendations was graded on the basis of the Oxford Centre for Evidence-Based Medicine grade of evidence (A–D) system (see www.cebm.net/levels_of_evidence.asp). In addition, the strength of each recommendation, in terms of the extent to which experts agreed that the recommendation is highly appropriate and a "first-line" practice, was reached for each recommendation. Recommendation strength was rated in 4 categories: very strong (>90% agreement), strong (>70% agreement), fair (>50% agreement), and weak (<50% agreement). The recommendations in the guidelines were developed only in areas of management that had at least "strong agreement" among experts.

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Not stated

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

Definitions for grades of evidence (A-D) and strengths of recommendation (weak, fair, strong, very strong) are provided at the end of the "Major Recommendations" field.

Treatment

Recommendation 1: After initial diagnosis, in cases of mild depression, clinicians should consider a period of active support and monitoring before starting other evidence-based treatment (**grade of evidence: B; strength of recommendation: very strong**).

Recommendation 2: If a primary care (PC) clinician identifies an adolescent with moderate or severe depression or complicating factors/conditions such as coexisting substance abuse or psychosis, consultation with a mental health specialist should be considered (**grade of evidence: C; strength of recommendation: strong**). Appropriate roles and responsibilities for ongoing management by the PC and mental health clinicians should be communicated and agreed upon (**grade of evidence: C; strength of recommendation: strong**). The patient and family should be consulted and approve the roles of the PC and mental health professionals (**grade of evidence: D; strength of recommendation: strong**).

Recommendation 3: PC clinicians should recommend scientifically tested and proven treatments (i.e., psychotherapies such as cognitive behavioral therapy [CBT] or interpersonal therapy [IPT] and/or antidepressant treatment such as selective serotonin reuptake inhibitors [SSRIs]) whenever possible and appropriate to achieve the goals of the treatment plan (**grade of evidence: A; strength of recommendation: very strong**).

Psychotherapies

Antidepressant Treatment

Recommendation 4: PC clinicians should monitor for the emergence of adverse events during antidepressant treatment (SSRIs) (**grade of evidence: B; strength of recommendation: very strong**).

Ongoing Management

Recommendation 1: Systematic and regular tracking of goals and outcomes from treatment should be performed, including assessment of depressive symptoms and functioning in several key domains: home, school, and peer settings (**grade of evidence: D; strength of recommendation: very strong**).

Recommendation 2: Diagnosis and initial treatment should be reassessed if no improvement is noted after 6 to 8 weeks of treatment (**grade of evidence: B; strength of recommendation: very strong**). Mental health consultation should be considered (**grade of evidence: D; strength of recommendation: very strong**).

Recommendation 3: For patients who achieve only partial improvement after PC diagnostic and therapeutic approaches have been exhausted (including exploration of poor adherence, comorbid disorders, and ongoing conflicts or abuse), a mental health consultation should be considered (**grade of evidence: D; strength of recommendation: very strong**).

Recommendation 4: PC clinicians should actively support depressed adolescents who are referred to mental health to ensure adequate management (**grade of evidence: D; strength of recommendation: very strong**). PC clinicians may also consider sharing care with mental health agencies/professionals when possible (**grade of evidence: B; strength of recommendation: very strong**). Appropriate roles and responsibilities regarding the provision and coordination of care should be communicated and agreed upon by the PC clinician and the mental health specialist (**grade of evidence: D; strength of recommendation: very strong**).

Definitions:

Grades of Evidence

Each recommendation is graded on the basis of the Oxford Centre for Evidence-Based Medicine grade of evidence (A–D) system (see www.cebm.net/levels_of_evidence.asp).

Strengths of Recommendation

The strength of each recommendation, in terms of the extent to which experts agreed that the recommendation is highly appropriate and a "first-line" practice, was reached for each recommendation. Recommendation strength was rated in 4 categories:

- Very strong (>90% agreement)
- Strong (>70% agreement)
- Fair (>50% agreement)
- Weak (<50% agreement)

CLINICAL ALGORITHM(S)

The original guideline document contains a "Clinical Management Flowchart."

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of evidence is identified and graded for each recommendation (see "Major Recommendations").

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

- Timely and effective intervention for adolescents with major depressive disorders (MDD) in the primary care setting
- Improvement in depressive symptoms
- Improvement in overall functioning

POTENTIAL HARMS

Recent reanalyses of safety data from clinical trials of antidepressants have led to a black-box warning from the Food and Drug Administration (FDA) regarding the use of these medications in children and adolescents and a recommendation for close monitoring. The exact wording of the FDA recommendation is, "all pediatric patients being treated with antidepressants for any indication should be observed closely for clinical worsening, suicidality, and unusual changes in behavior, especially during the initial few months of a course of drug therapy, or at times of dose changes, either increases or decreases."

Further information on adverse effects of antidepressants is described in the accompanying "toolkit" (See "Availability of companion documents" field).

CONTRAINDICATIONS

CONTRAINDICATIONS

Treatment with selective serotonin reuptake inhibitors (SSRIs - citalopram, fluoxetine, fluvoxamine, paroxetine, sertraline, and escitalopram) is contraindicated in patients taking monoamine oxidase inhibitors (MAOIs).

QUALIFYING STATEMENTS

QUALIFYING STATEMENTS

- These guidelines cannot replace clinical judgment, and they should not be the sole source of guidance for adolescent depression management. Nonetheless, the guidelines may assist primary care clinicians in the management of depressed adolescents in an era of great clinical need and a shortage of mental health specialists.
- Although these guidelines cover a range of issues regarding the management of adolescent depression in the primary care setting, there were other controversial areas that were not addressed in these recommendations. These included such issues as universal screening, using a second antidepressant when patients' conditions fail to respond to an initial antidepressant, and the treatment of subthreshold symptoms. New emerging evidence may impact on the inclusion of such areas in future iterations of the guidelines and the accompanying toolkit. Many of these recommendations are made in the face of absence of evidence or lower levels of evidence.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

Preparatory Steps

Because the management of adolescent depression may constitute a new or major challenge for some primary care (PC) practices, a number of important considerations should be kept in mind when preparing to implement the guidelines, given the findings from studies in the adult literature, input from our focus groups with clinicians, families and patients, and the experience of members of the Guidelines for the Management of Adolescent Depression in Primary Care (GLAD-PC) Steering Group. Specifically, PC clinicians who manage adolescent depression should pursue (1) additional education regarding issues such as advances in screening, diagnosis, treatment, and follow-up, liability, consent, confidentiality, and billing, (2) practice and systems changes such as office staff training and "buy-in," electronic medical charts, and automated tracking systems, whenever available, and (3) establishing linkages with mental health services.

Linkages with community mental health resources are necessary to both meet the learning needs of the PC clinician and facilitate consultation/referral of difficult cases. Practice and systems changes are useful in increasing clinicians' capacity to ensure monitoring and follow-up of patients with depression. For example, staff training may help prioritize calls from adolescent patients who may not state the nature of their call. Specific tools and/or templates have been developed that offer examples of how to efficiently identify, monitor, track, and refer teens with depression. These materials are available in the GLAD-PC toolkit (available at

www.glad-pc.org). The toolkit addresses how each of the recommendations might be accomplished without each practice necessarily having to "reinvent the wheel."

IMPLEMENTATION TOOLS

Chart Documentation/Checklists/Forms
Clinical Algorithm
Foreign Language Translations
Patient Resources
Tool Kits

For information about [availability](#), see the "Availability of Companion Documents" and "Patient Resources" fields below.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Getting Better
Living with Illness

IOM DOMAIN

Effectiveness
Patient-centeredness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

Cheung AH, Zuckerbrot RA, Jensen PS, Ghalib K, Laraque D, Stein RE, GLAD-PC Steering Group. Guidelines for Adolescent Depression in Primary Care (GLAD-PC): II. Treatment and ongoing management. Pediatrics 2007 Nov;120(5):e1313-26. [91 references] [PubMed](#)

ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

2007 Nov

GUIDELINE DEVELOPER(S)

Guidelines for Adolescent Depression in Primary Care (GLAD-PC)

SOURCE(S) OF FUNDING

Guidelines for Adolescent Depression in Primary Care (GLAD-PC)

GUIDELINE COMMITTEE

Guidelines for Adolescent Depression in Primary Care (GLAD-PC) Steering Group

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Authors: Amy H. Cheung, MD, Department of Psychiatry, University of Toronto, Toronto, Ontario, Canada; Rachel A. Zuckerbrot, MD, Division of Child Psychiatry, Department of Psychiatry, Columbia University/New York State Psychiatric Institute, New York, New York; Peter S. Jensen, MD, REACH Institute, Resource for Advancing Children's Health, New York, New York; Kareem Ghalib, MD, Division of Child Psychiatry, Department of Psychiatry, Columbia University/New York State Psychiatric Institute, New York, New York; Danielle Laraque, MD, Department of Pediatrics, Mount Sinai School of Medicine, New York, New York; Ruth E. K. Stein, MD, Department of Pediatrics, Albert Einstein College of Medicine, Bronx, New York

GLAD-PC Project Team Members: Peter S. Jensen, MD (project director, REACH Institute); Amy Cheung, MD (project coordinator, University of Toronto/Columbia University); Rachel A. Zuckerbrot, MD (project coordinator, Columbia University); Kareem Ghalib, MD (Columbia University); Anthony Levitt, MD (project consultant, University of Toronto)

GLAD-PC Steering Committee Members: Boris Birmaher, MD (Western Psychiatric Institute & Clinic, University of Pittsburgh); John Campo, MD (Ohio State University and Nationwide Children's Hospital); Greg Clarke, PhD (Center for Health Research, Kaiser Permanente); Dave Davis, MD (University of Toronto); Angela Diaz, MD (Mount Sinai School of Medicine); Allen Dietrich, MD (Dartmouth Hitchcock Medical Center); Graham Emslie, MD (University of Texas Southwestern Medical School); Bernard Ewigman, MD (Department of Family Medicine, University of Chicago); Eric Fombonne, MD (McGill University); Sherry Glied, PhD (Columbia University); Kimberly Eaton Hoagwood, PhD (Office of Mental Health, New York State/Columbia University); Charles Homer, MD (National Initiative for Children's Healthcare Quality); Danielle Laraque, MD (AAP New York Chapter 3, District II/Mount Sinai School of Medicine); Miriam Kaufman, MD (Hospital for Sick Children, University of Toronto); Kelly J. Kelleher, MD (Ohio State University); Stanley Kutcher, MD (Dalhousie Medical School); Michael Malus, MD (Department of Family Medicine, McGill University); James Perrin, MD (Massachusetts Medical School/Harvard Medical School); Harold Pincus, MD (Columbia University/New York State Psychiatric Institute); Brenda Reiss-Brennan, APRN (Intermountain Health); Diane Sacks, MD (Canadian Paediatric Society); Ruth E. K. Stein, MD (Forum for Child Health, New York Academy of Medicine, Albert Einstein College of Medicine); Bruce Waslick, MD, Baystate Health Systems, MA)

FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Dr Cheung is on the speakers' bureau of Eli Lilly; Dr Jensen has received several unrestricted educational grants from Eli Lilly, McNeil, and Janssen-Ortho, is a consultant for Shire-Richwood, UCB Pharma, McNeil, and Janssen-Ortho, and is on the speakers' bureau for UCB Pharma, McNeil, and Janssen-Ortho. The other

authors have indicated they have no financial relationships relevant to this article to disclose.

ENDORSER(S)

American Academy of Child and Adolescent Psychiatry - Medical Specialty Society
Canadian Academy of Child Psychiatry - Medical Specialty Society
Canadian Association for Adolescent Health - Medical Specialty Society
Canadian Paediatric Society - Medical Specialty Society
Canadian Psychiatric Association - Medical Specialty Society
College of Family Physicians of Canada - Professional Association
Depression and Bipolar Support Alliance - Disease Specific Society
Federation of Families for Children's Mental Health - Medical Specialty Society
Mental Health America - Medical Specialty Society
Mental Health Association of New York City - Professional Association
National Alliance on Mental Illness - Private Nonprofit Organization
National Association of Pediatric Nurse Practitioners - Professional Association
Society for Adolescent Medicine - Medical Specialty Society
Society for Developmental and Behavioral Pediatrics - Professional Association

GUIDELINE STATUS

This is the current release of the guideline.

GUIDELINE AVAILABILITY

Electronic copies: Available from the [Pediatrics journal Web site](#).

Print copies: Available from Amy H. Cheung, MD, University of Toronto, Department of Psychiatry, 33 Russell St, 3rd Floor Tower, Toronto, Ontario, Canada M5S 2S1. E-mail: dramy.cheung@gmail.com.

AVAILABILITY OF COMPANION DOCUMENTS

The following is available:

- Guidelines for Adolescent Depression in Primary Care (GLAD – PC) tool kit. A collection of resources for patients and healthcare providers. 2007. 141 p. Electronic copies: Available from the [Guidelines for Adolescent Depression - Primary Care Web site](#).

PATIENT RESOURCES

The following is available:

- Guidelines for Adolescent Depression in Primary Care (GLAD – PC) tool kit. A collection of resources for patients and healthcare providers. 2007. 141 p. Electronic copies: Available from the [Guidelines for Adolescent Depression - Primary Care Web site](#).

Please note: This patient information is intended to provide health professionals with information to share with their patients to help them better understand their health and their diagnosed disorders. By providing access to this patient information, it is not the intention of NGC to provide specific medical advice for particular patients. Rather we urge patients and their representatives to review this material and then to consult with a licensed health professional for evaluation of treatment options suitable for them as well as for diagnosis and answers to their personal medical questions. This patient information has been derived and prepared from a guideline for health care professionals included on NGC by the authors or publishers of that original guideline. The patient information is not reviewed by NGC to establish whether or not it accurately reflects the original guideline's content.

NGC STATUS

This NGC summary was completed by ECRI Institute on May 30, 2008. The information was verified by the guideline developer on August 18, 2008.

COPYRIGHT STATEMENT

This NGC summary is based on the original guideline, which is subject to the guideline developer's copyright restrictions.

DISCLAIMER

NGC DISCLAIMER

The National Guideline Clearinghouse™ (NGC) does not develop, produce, approve, or endorse the guidelines represented on this site.

All guidelines summarized by NGC and hosted on our site are produced under the auspices of medical specialty societies, relevant professional associations, public or private organizations, other government agencies, health care organizations or plans, and similar entities.

Guidelines represented on the NGC Web site are submitted by guideline developers, and are screened solely to determine that they meet the NGC Inclusion Criteria which may be found at <http://www.guideline.gov/about/inclusion.aspx>.

NGC, AHRQ, and its contractor ECRI Institute make no warranties concerning the content or clinical efficacy or effectiveness of the clinical practice guidelines and related materials represented on this site. Moreover, the views and opinions of developers or authors of guidelines represented on this site do not necessarily state or reflect those of NGC, AHRQ, or its contractor ECRI Institute, and inclusion or hosting of guidelines in NGC may not be used for advertising or commercial endorsement purposes.

Readers with questions regarding guideline content are directed to contact the guideline developer.

Date Modified: 9/15/2008

